Abstract

Wireless sensor node refers to a group of specifically designed, fabricated, dispersed and dedicated sensors for monitoring and recording the physical conditions of the environment and organizing the collected data at a location. Internet of things (IoT) is a network of physical devices and it is tagging our day-to-day objects with our lives. To access data from the sensor node through web page is much easier way. In this paper an attempt is made to design web based approach to monitor weather parameters and their conditions. The webpage is an interface between user and the weather monitoring system. To acquire and transmit weather parameters, wireless sensor node is designed and fabricated using Arduino UNO board. Also, to connect the sensor node to the internet to send the data to the cloud an ESP8266 Wi-Fi device is interfaced with Arduino. The weather parameters such as atmospheric temperature, humidity, sunlight (intensity), and rainfall are measured and transmitted over the internet. A webpage is created to display the present and past values of the measured parameters. The page also displays the current status of the parameters being measured. This page is linked
with the website so that the parameters can be accessed over the internet.

References

9. DHT11 Datasheet
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